

NEWS, SPOTTED

# Spotted around the web: Protein ubiquitination; meninges immunity; scientific image problems

BY JILL ADAMS, ANGIE VOYLES ASKHAM, LAURA DATTARO, PETER HESS

2 DECEMBER 2022

WEEK OF NOVEMBER 28<sup>TH</sup>

## Research roundup

- Rats that lack metabotropic glutamate receptor 5 have atypical social interactions and increased repetitive and anxiety-like behaviors, making them a potential model for studying molecular mechanisms of autism. [\*PLOS One\*](#)
- Neurons missing the gene FMR1 have unusually fast rates of protein ubiquitination, which tags molecules for destruction, a new method for visualizing the process at dendrites confirms. [\*Cell Reports\*](#)
- Receptive language skills, assessed by a word-picture matching task, predict speech production in minimally verbal autistic people. [\*Autism & Developmental Language Impairments\*](#)
- Maternal rheumatoid arthritis appears to increase the likelihood of having a child with autism, according to a meta-analysis of 10 studies encompassing more than 6 million participants. [\*Frontiers in Medicine\*](#)
- After age 40, autistic adults experience a faster decline in visual-memory skills than do non-autistic adults. [\*Frontiers in Aging Neuroscience\*](#)
- Health-care workers, educators and community members in Western China are generally aware of autism, but those who are older or live in more rural areas are more likely to hold misconceptions, according to a survey. [\*Frontiers in Psychiatry\*](#)
- A community-based early-detection program makes it possible to diagnose toddlers with autism nearly 3 years earlier than average. [\*Journal of Developmental & Behavioral Pediatrics\*](#)
- Different brain imaging methods result in dissimilar brain activation patterns in autistic adolescents doing a language task. [\*Neuroimage: Reports\*](#)

- In a mouse model of autism, the meninges display a range of atypical immune measures that may contribute to neuroinflammation. ***Brain, Behavior, & Immunity – Health***

**Seeing double:** Duplicated images and other flaws may plague around a third of scientific publications.

- No single measure captures the multiple aspects of camouflaging in autism, according to a review that compared self-report, parent-report and discrepancy-scoring methods. ***Autism Research***
- Researchers have identified 138 genes enriched in de novo variants in 46,612 people with autism or developmental disabilities, using three different modeling methods. ***PNAS***

## Science and society

- In September, the Chinese National Health Commission launched an autism screening and intervention program for children 6 years and younger, which involves parent education and clinical support. ***The Lancet Psychiatry***
- A hybrid symposium, to be held on 30 November and sponsored by McGill University in Montreal, Canada, is scheduled to cover open-science initiatives in neuroscience research. ***The Neuro***
- A father writes about his growing disillusionment with applied behavior analysis as treatment for his autistic son. ***The Boston Globe***
- An autism service provider in Utah is suing former employees for alleged violations of noncompete contracts, potentially contributing to service shortages in the state. ***Daily Herald***
- As much as 35 percent of scientific research papers may have problems with their images, including manipulation and duplication. ***Laboratory News***
- Catherine Dulac, who studies brain correlates of social behavior in mice, has been named Harvard University Professor, only the 7<sup>th</sup> woman and 23<sup>rd</sup> person to hold the title. ***Harvard University***
- A majority of U.S.-based psychologists say that they have no capacity to take new patients and that waiting lists are longer now than before the pandemic, according to a survey of 2,300 practitioners. ***American Psychological Association***
- Families seeking autism diagnoses in Scotland are met with wait times as long as 4.5 years. ***STV News***

Cite this article: <https://doi.org/10.53053/ETRT6213>

---